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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			EXAMINER TORRES VELAZQUEZ, NORCA LIZ	
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			08/28/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/966,309

**Applicant(s)**

KRANENDONK, DIRK

**Examiner**

Norca L. Torres-Velazquez

**Art Unit**

1794

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 22-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 22-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 13, 2008 has been entered.

***Response to Amendment***

2. The rejection of claim 1 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicant's amendment to claim 1. No new matter was found in the newly limitations included in the claim on 8/13/2008.
3. The rejection of claims 8 and 30 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicant's remarks.
4. Claims 1-13 and 22-40 are pending.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have amended independent claim 1 to further recite the limitation “*said continuous coating being free of random discontinuities that increase porosity and which are susceptible to creating visible irregularities the surface is roller painted*”. It is noted that there is no expressed or implied support in the specification for such limitation. It is noted that the disclosure of the present invention fails to teach, disclose or imply what are the claimed “random discontinuities”. While Figure 2 illustrates a layer of thermoplastic polymer 54, it does not teach what “random discontinuities” are, as to provide support for the claimed continuous coating being free of “random discontinuities”. It cannot be determined from the disclosure if the now claimed “random discontinuities” are microscopic or macroscopic?

***Claim Rejections – 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims **1, 23, 36, 40**, 3-4, 11-12, 22, 25-26 and 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by JACKSON (US 5,876,551).

JACKSON teaches a breathable, decorative wall-covering having a smooth, continuous, aesthetically appealing exposed surface which can be printed with a design or pattern having sharply defined edges, and having a relatively high moisture permeability. The wall covering includes a porous polymeric ply fused to a nonwoven substrate ply. The porous polymeric ply is formed by thermally fusing a plastisol coating. The plastisol coating is thick enough to allow the formation of a coating, which upon thermal fusion provides a polymeric *ply having a smooth continuous appearance*. Upon heating the plastisol coating to a temperature, which is sufficient to cause fusion of resins contained therein, a highly permeable polymeric ply having the

appearance of smooth, continuous film is formed. (Abstract) The reference further teaches that suitable resins used in the plastisols generally include a variety of thermoplastic resins, which are capable of fusing and absorbing the plasticizer upon application of heat. (Column 4, lines 62-67) Further, JACKSON teaches the incorporation of titanium oxide, among other components, in the plastisol. (Column 5, lines 27-37) This is equated to the claimed opacifier. It is noted that the plastisol described by JACKSON is a dispersion. With regards to claim 22 and 34, JACKSON further teaches that the plastisol coating is preferably applied at a coating weight of from about 47 grams per square meter to about 155 grams per square meter. (Column 5, lines 52-57) With regards to claims 11 and 12, JACKSON teaches the use of mineral fibers in the nonwoven and also teaches that the area weight of the nonwoven is from about 47 gsm to about 61 gsm. (Column 4, lines 32 and lines 59-61) JACKSON also teaches that the two ply composite wall covering generally have a moisture permeability of from about 25 perms to about 50 perms. (Column 6, lines 42-44) With regards to claim 40, it is noted herein that Applicants describe that a "non-smooth" surface structure is obtained by the addition of mineral fillers to the polymeric matrix material. [0033] JACKSON teaches the inclusion of additives or compounding ingredients such as silicas into the plastisol composition. (Refer to Col. 5, lines 27-37) It is the Examiner's interpretation that the materials disclosed by JACKSON read on those described by Applicant's own Specification as to produce the claimed "non-smooth surface". With regards to claim 23, it is noted that the invention of JACKSON provides for printing the exposed face of the polymeric ply by different methods. (Refer to Col. 6, lines 25-36) Giving the broadest reasonable interpretation to the claimed "layer of paint", the Examiner equates the printed

surface of the reference. It is noted that the manner in which the paint is applied is not relevant to the final product being claimed.

It is the Examiner's interpretation that the plastisol taught by JACKSON will read on the presently claimed thermoplastic polymer coating since the plastisol contains thermoplastic resins in a dispersion. The nonwoven substrate ply is equated to the presently claimed nonwoven fiber tissue or mat.

***Claim Rejections - 35 USC § 102/103***

8. Claims 2, 8, 24, 30 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JACKSON (US 5,876,551).

JACKSON is silent with respect to the claimed surface tension of the coating surface tension and the water transmission rate. However, it is reasonable to presume that the claimed properties are inherent to the invention of JACKSON et al. Support for said presumption is found in the use of the same starting materials (i.e. fiber matt and thermoplastic polymer coating), like processes of making the articles (i.e., melting polymer of the matt), and the production of similar end-products (i.e., reinforced mineral fiber materials, etc...). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the presently claimed function of surface tension and water transmission rate would obviously have been provided as a result of the product of the JACKSON et al. reference. *Note In re Best*, 195 USPQ 433. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner, et al.* (CCPA) 186 USPQ 80.

***Claim Rejections - 35 USC § 103***

9. Claims 5-7, 9-10, 13, 27-29, 31-32, 35 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over JACKSON (US 5,876,551) as applied above, and further in view of NUCCI et al. (US 6,265,067 B1).

While JACKSON teaches the use of thermoplastic resins in the plastisols, it fails to teach the use of polymer resins such as low-density polyethylene, high-density polyethylene, polypropylene or combinations of these. The reference further fails to teach the claimed concentration of mineral filler nor a polymeric material composition such as that claimed in claims 13, 35 and 38 of the present invention.

NUCCI et al. relates to a sheet of plastic material which feels like and has at least some of the properties of paper and that can be used to replace stitched multi-wall papers materials. (Col. 1, lines 12-21) The reference teaches that depending on the required properties of the multilayer sheet, the different layers may comprise linear low-density polyethylene, high-density polyethylene, or a mixture thereof. (Col. 2, lines 7-17) Among the compositions disclosed by the reference is that comprising between about 40 to 90 percent polyethylene, about 5-10 weight percent of a pigment and between 5-50 weight percent of a finely granulated material. (Refer to Col. 3, lines 16-35) The reference teaches the use of particulate calcium carbonate dispersed in a high density polyethylene base as the granulated material and teaches the use of titanium dioxide as the pigment. (Refer to Col. 2, lines 7-17)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the porous polymeric ply composition of JACKSON and provide it with the composition taught by NUCCI et al. with the motivation of producing a

surface material that combines some of the properties of both paper sheets (such as oxygen transmission rate, water vapor transmission rate and coefficient of friction) and plastic sheets (such as higher resistance), as taught by NUCCI et al. (Col. 1, lines 1-49)

***Response to Arguments***

10. Applicant's arguments filed August 13, 2008 with regards to the prior art of JACKSON have been fully considered but they are not persuasive for the reasons stated in the rejections above and further in view of the Examiner's remarks herein:

- Applicants argue that Jackson does not disclose, teach or otherwise suggest a coating that covers the non-woven mat in a continuous fashion and free of random discontinuities, as shown in Applicant's Figure 2. Applicants indicate that the Jackson reference discloses a material having a surface with intentionally formed "randomly distributed discontinuities" and argue that these discontinuities are disadvantageous from the standpoint that they would more readily receive any paint roller-applied to the surface and magnify its imperfect, or "irregular" nature. As stated in the previous office action, Figure 2 depicts the layers of the wall covering material, but still are not sufficient to define what is meant by "random discontinuities". The disclosure is silent as to what these discontinuities are (i.e. microscopic or macroscopic discontinuities). With regards to claim 1, the Examiner gives the broadest reasonable interpretation to the claim since the Specification does not preclude the type of microscopic pores taught by JACKSON.

As stated before by the Examiner, the Jackson reference provides a breathable or moisture permeable wall covering having a porous polymeric ply, which is fused to and supported by a nonwoven substrate ply. The porous polymeric ply as a smooth,



continuous aesthetically pleasing appearance, while simultaneously achieving a moisture vapor permeability which prevents moisture from being trapped on or within a wall to which the wall covering is applied. More specifically, the porous polymeric ply has a substantially macroscopic-continuity wherein a plurality or multiplicity of miniature or microscopic discontinuities or holes are randomly distributed. (Col. 2, lines 19-32) The Examiner equates such description as providing a continuous layer. It is noted that the present invention does not preclude having micropores, which are necessary in order to provide a material with gas permeability. Nor the specification indicates that the polymeric coating is a monolithic film.

While Figure 2 of the present application does not show “holes” or “pores”, it is noted that the presence of certain porosity is recognized and desirable by the disclosure of the present application. (Refer to [0033]) The rejections over JACKSON are maintained herein since the microscopic discontinuities of the polymeric material of the reference do not affect the continuity or smoothness of its outer or exposed surface when looked by the unaided eye. (Jackson, Col. 2, lines 32-34) Therefore, “visible irregularities” would not be created when roller painted since the discontinuities in the polymeric material are microscopic and are not visible by the unaided eye.

- With regards to arguments regarding claim 40, it is noted that Applicants Specification teach that one preferred mineral filler is calcium carbonate, but also discloses that those skilled in the art will recognize that other mineral fillers may be used alone or in combination with the calcium carbonate. These include mica, talcum and clay. The

reference further describes that a “non-smooth” surface structure is obtained by the addition of mineral fillers to the polymeric matrix material. [0033]

The prior art of JACKSON teaches the inclusion of additives or compounding ingredients such as silicas into the plastisol composition. (Refer to Col. 5, lines 27-37) It is noted herein that “mica” is any of several silicates of varying chemical composition but with similar properties and crystalline structure. Talcum is magnesium silicate and clay is hydrated aluminum silicate. The Jackson reference teaches silicas such as calcium silicate (which is known to be used as filler for paper and paper coatings), and the like. Therefore, it is the Examiner’s interpretation that the materials disclosed by JACKSON are equivalent to those described by Applicant’s own Specification as to produce the claimed “non-smooth surface”.

11. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Norca L. Torres-Velazquez/  
Primary Examiner, Art Unit 1794

August 27, 2008